

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
21 July 2005 (21.07.2005)

PCT

(10) International Publication Number
WO 2005/066165 A1

(51) International Patent Classification⁷: **C07D 417/14**,
413/14, 403/14, 409/14, A61P 25/18, A61K 31/404,
31/423, 31/428, 31/454, 31/4709, 31/55

(21) International Application Number:
PCT/IB2004/004239

(22) International Filing Date:
20 December 2004 (20.12.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/533,761 31 December 2003 (31.12.2003) US

(71) Applicant (for all designated States except US):
WARNER-LAMBERT COMPANY LLC [US/US];
201 Tabor Road, Morris Plains, NJ 07950 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **CHO, Stephen, Sung, Yong** [US/US]; Pfizer Global Research and Development, Ann Arbor Laboratories, 2800 Plymouth Road, Ann Arbor, MI 48105 (US). **GREGORY, Tracy, Fay** [US/US]; Pfizer Global Research and Development, Ann Arbor Laboratories, 2800 Plymouth Road, Ann Arbor, MI 48105 (US). **GUZZO, Peter, Robert** [US/US]; 1146 Millington Road, Niskayuna, NY 12309 (US). **HOWARD, Harry, Ralph, Jr.** [US/US]; Pfizer Global Research and Development, Eastern Point Road, Groton, CT 06340 (US). **NIKAM, Sham, Shridhar** [IN/US]; Pfizer Global Research and Development, Ann Arbor Laboratories, 2800 Plymouth Road, Ann Arbor, MI 48105 (US). **SURMAN,**

Matthew, David [US/US]; 488 Spring Hollow Court, Albany, NY 12203 (US). **WALTERS, Michael, Anthony** [US/US]; Pfizer Global Research and Development, Ann Arbor Laboratories, 2800 Plymouth Road, Ann Arbor, MI 48105 (US).

(74) Agents: **FEDERMAN, Evan, J.** et al.; Pfizer Inc., 201 Tabor Road, Morris Plains, NJ 07950 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

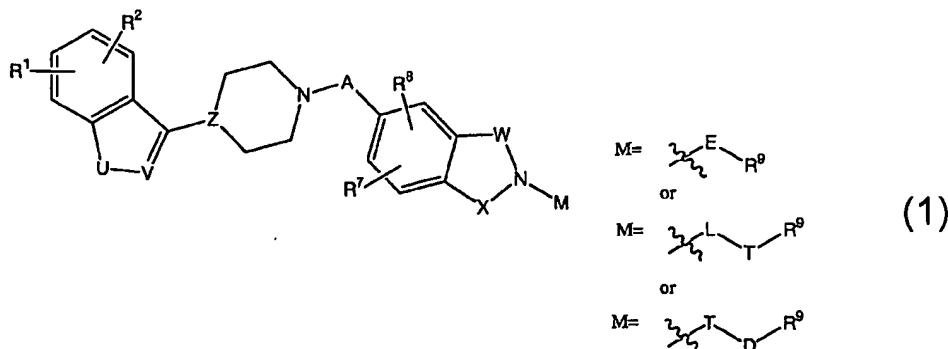
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: N-SUBSTITUTED PIPERIDINE AND PIPERAZINE DERIVATIVES



(57) Abstract: This invention relates to compounds of the formula 1 wherein R¹, R², R⁷, R⁸, R⁹, U, V, Z, A, W, X, M, E, L, T and D are defined as in the specification, pharmaceutical compositions containing them and their use in the treatment of central nervous system and other disorders.

WO 2005/066165 A1